

CLAIMS

1. Data transmission method in a radio communication network comprising:
  - 5 - at least one base station (101); and
  - at least one terminal (102) adapted to individually and periodically transmitting binary information on an uplink radio channel (TPC), to at least one of the said base stations called the first base station, characterised in that the said radio channel carries:
    - 10 - first information (501, 521, 531) for controlling the transmission power of the said first base station; and
    - second information (511) designed to a purpose other than controlling the power of the said first base station.
2. Method according to claim 1, characterised in that the said first base station manages at least one mobile telecommunication network cell (100).
- 15 3. Method according to either of claims 1 and 2, characterised in that the said first base station sends at least one part of the said received second information to a communication equipment (111) capable of transmitting data to the said terminal, and in that the said communication equipment processes the said at least one part of the said second information.
- 20 4. Method according to claim 3, characterised in that when the said communication equipment is in communication with the said terminal equipment, it adjusts the data radio transmission power to be sent to the said terminal as a function of the result of the said processing.
- 25 5. Method according to either of claims 3 and 4, characterised in that the said communication equipment communicates with the said terminal on a single directional channel (123) used to transmit data from the said communication equipment to the said terminal.
- 30 6. Method according to any one of claims 3 to 5, characterised in that the said communication equipment is adapted to sending data using a multiple carrier modulation (OFDM).
7. Method according to any one of claims 3 to 6, characterised in that the said communication equipment supports communications according to a

protocol compatible with the HIPERLAN/2 standard and / or the IEEE 802.11 standard.

8. Method according to any one of claims 3 to 7, characterised in that the said equipment is a base station (111) distinct from the said first base station 5 (101).

9. Method according to any one of claims 3 to 7, characterised in that the said equipment is a terminal.

10. Method according to any one of claims 1 to 9, characterised in that the said other purpose comprises controlling the transmission power of a base 10 station distinct from the said first base station.

11. Method according to any one of claims 1 to 10, characterised in that the said other purpose includes acknowledgement of data transmitted by a base station to the said terminal on a radio channel, the said acknowledgement indicating whether or not data were correctly received by the said terminal.

15 12. Method according to any one of claims 1 to 11, characterised in that the said other purpose belongs to the following group of purposes:

- data transmissions to a base station distinct from the said first base station;
- management of time slaving between a base station and the said 20 terminal;
- management of frequency slaving between a base station and the said terminal; and
- control of the data flow sent to and / or from the said terminal.

25 13. Method according to any one of claims 1 to 12, characterised in that the position of the said first and second information is predetermined.

14. Method according to any one of claims 1 to 13, characterised in that the position of the said first and second information is determined dynamically.

30 15. Method according to any one of claims 1 to 14, characterised in that the said second information represents not more than 10% of the said elementary information.

16. Method according to claim 15, characterised in that the said second information represents not more than 1% of the said elementary information.

17. Terminal adapted to individually and periodically transmitting binary information on an uplink radio channel (TPC) to a base station called the first base station in a radio communication network,  
characterised in that it includes means of distinguishing and inserting  
5 among the said elementary information:  
- first information for controlling the transmission power of the said first base station; and  
- second information designed to a purpose other than the said control of the power of the said first base station.

10 18. Base station in a cellular network, adapted to individually and periodically receiving binary information on an uplink radio channel (TPC), from a terminal,  
characterised in that it includes means of distinguishing and extracting among the said binary information:  
15 - first information for controlling the transmission power of the said first base station; and  
- second information designed to a purpose other than controlling the power of the said first base station.

19. Communication system characterised in that it includes at least one terminal according to claim 17 and at least one base station according to claim 18.

20. Signal sent by a terminal to a base station in a radio communication network and carrying binary information individually and periodically transmitted by the said terminal to the said base station, on an uplink radio channel (TPC),  
25 characterised in that the said binary information includes:  
- first information for controlling the transmission power of the said base station; and  
- second information designed to a purpose other than said control of the power of the said base station.